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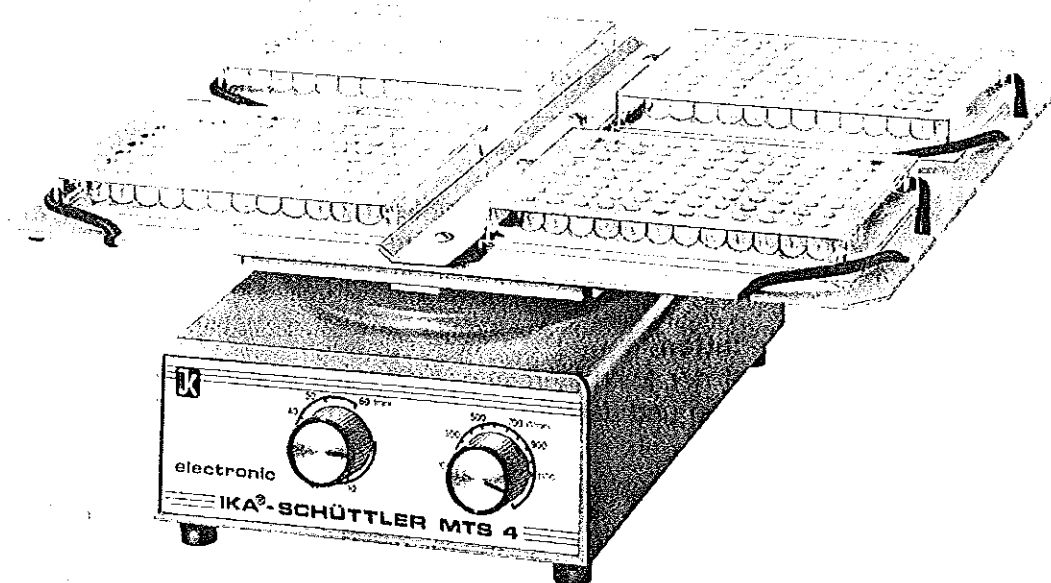
JANKE & KUNKEL GMBH & CO. KG
IKA-WERK STAUFEN

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09.890.00 11/84

Betriebsanleitung
Operating Instructions
Mode d'emploi

IKA-Schüttler MTS 2 und MTS 4



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8. Technische Daten

Netzspannung	siehe Gerätetypenschild
Leistungsaufnahme	20 W
Leistungsabgabe	4 W
zul. Einschaltdauer	100 %
Drehzahlbereich	0 – 1100 1/min.
Drehzahlregelung	elektronisch
Schüttelbewegung	horizontal kreisförmig
Schüttelhub	3 mm Durchmesser
zulässige Umgebungstemperatur	+ 5 bis + 40° C
maximale relative Feuchte	85 %
Abmessungen ohne Aufsatz L × B × H	230 × 154 × 110 mm
Gewicht ohne Aufsatz	2,2 kg

8. Technical data

Mains voltage	see instrument plate
Input	20 W
Output	4 W
Permissible duration of operation	continuous
Speed range	0 – 1100 1/min.
Speed controll	electronic
Shaking movement	horizontally circular
Shaking lift	3 mm diameter
Permissible ambient temperature	+ 5 to 40° C
Maximum rel. humidity	85 %
Dimensions (without attachment)	230 × 154 × 110 (l × w × h)
Weight without attachment	2.2 kg

8. Caractéristiques techniques

Tension de réseau	voir plaque signalétique
Puissance absorbée	20 W
Puissance débitée	4 W
Durée de mise en marche	100 %, en continu
Gamme de vitesse	0 – 1100 1/min.
Réglage de la vitesse	électronique
Mouvement de secouage	horizontal, circulaire
Course	3 mm Ø
Température ambiante tolérée	+ 5 à + 40° C
Humidité relative max.	85 %
Dimensions sans support	230 × 154 × 110 mm
Poids sans support	2,2 kg

1. Unpacking

Please unpack the instrument carefully and check that it is not damaged. It is important that any damage incurred in transport is recognised at the time of unpacking. If you do find such damage, notify the carrier immediately (Post Office, Railways or forwarding agent).

2. Installation

Please make sure that the instrument is not obstructed on any side.

Please observe the permissible environmental conditions specified in the technical data.

3. Information on the drive

The heart of the drive is a strong, non-blocking external rotor type capacitor motor. The speed of the motor is measured opto-electronically and kept constant by electronic controls.

The shaking platform is driven by an eccentric with a 3 mm lift (peak to peak). The rotary movement of the eccentric is transmitted to the platform by a strong ball bearing.

Three tubular connecting pieces prevent the platform from turning as well. Contrary to traditional one-point holders, these silicon connecting pieces, fitted symmetrically to the centre of rotation, ensure a **uniform horizontally circular movement** at each point of the platform.

4. Commissioning

Provided the voltage quoted on the instrument plate agrees with the mains voltage — please check — the instrument is immediately ready for use.

The desired duration of shaking is set on the time switch.

5. Fastening of the microtiter plates

Two microtiter plates can be shaken simultaneously. The edges of the plates are to be put below the O-rings on the sides of the attachment and then slid under the middle bar.

6. Maintenance

The instrument is maintenance-free. The motor bearings and the eccentric bearings are subject to normal wear, other components to natural ageing. Should the three tubular connecting pieces which secure the platform against turning become defective, they can be easily replaced by „laboratory supplies“.

A silicon hose of 8 × 12 mm Ø can be used. It should be cut to a length of exactly 31 mm.

Inside the instrument you will find a loose sheet showing the wiring and circuit diagram.

When ordering spare parts, please quote the correct model and serial number of your instrument.

7. Guarantee

You have acquired an Original IKA-Laboratory Instrument which meets the highest requirements of quality and design. In accordance with the IKA terms of warranty, this instrument is guaranteed for a period of 12 months. In the event of any claim guarantee, please contact your laboratory dealer.



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